

941D SERIES 16mm PLANETRY (EPICYCLIC) SUB MINIATURE METAL GEARBOX

RE-941 MOTOR



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

941D41	(3v - 12v)	RATIO 4:1	941D1281	(3v - 12v)	RATIO 128:1
941D191	(3v - 12v)	RATIO 19:1	941D2311	(3v - 12v)	RATIO 231:1
941D291	(3v - 12v)	RATIO 29:1	941D4551	(3v - 12v)	RATIO 455:1
941D621	(3v - 12v)	RATIO 62:1	941D5611	(3v - 12v)	RATIO 561:1
941D841	(3v - 12v)	RATIO 84:1	941D10141	(3v - 12v)	RATIO 1014:1
941D1041	(3v - 12v)	RATIO 104:1			

Designed for heavy-duty industrial and model applications this robust unit boasts a powerful high quality motor with sintered bronze bearings. The metal gearbox incorporates sleeved bearings, enabling the high torque transfer from the motor to be transmitted through the gearbox.

MOTOR DATA. (RE-941D)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY					STALL		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF	TORQUE	
			R.P.M.	A	R.P.M.	A	oz-in	g-cm	W	%	oz-in	g-cm
RE-941D	3 - 12	12v Constant	8000	0.035	5500	0.115	0.1	7.2	0.47	45.6	0.56	est 40

REDUCTION TABLE. R.P.M. (NO LOAD)

SUPPLY VOLTAGE	3v	6v	9v	12v
941D41	500	1000	1500	2000
941D191	105	211	316	421
941D291	69	138	207	276
941D621	32	65	97	129
941D841	24	48	71	95
941D1041	19	38	58	77
941D1281	16	31	47	63
941D2311	9	17	26	35
941D4551	4	9	13	18
941D5611	3	7	11	14
941D10141	2	4	6	8

WEIGHT	
941D41	34g
941D191	39g
941D291	39g
941D621	43g
941D841	42g
941D1041	42g
941D1281	43g
941D2311	47g
941D4551	46g
941D5611	46g
941D10141	50g

Note: Motor speeds may vary by (+) or (-) 12.5%
 Note: It is not recommended to run the motor/gearbox combination at 1.5v

GEARED MOTOR TORQUE RATINGS AT MAX. EFFICIENCY.

	At 12v (g.cm)	Gearbox Efficiency %
4:1	23	80
19:1	96	70
29:1	146	70
62:1	268	60
84:1	363	60
104:1	449	60
128:1	553	60
231:1	832	50
455:1	1638	50
561:1	2000	50
1014:1	2400	40

941D SERIES	
No Load Backlash	Max 3 deg.
Max Radial Load (10mm from flange)	500gf.
Shaft Axial Load	500gf.

24 volt versions are available for this range of motor-gearboxes. Performance data is similar to 12 volt versions. This version also has an extended 10mm rear shaft to accommodate motor encoders. When ordering please use 12v version part number suffixed with 24V. I.E. 941D621 will be 941D62124V

NOTE: To establish Torque Rating in Nm, divide g.cm by 10,197.0

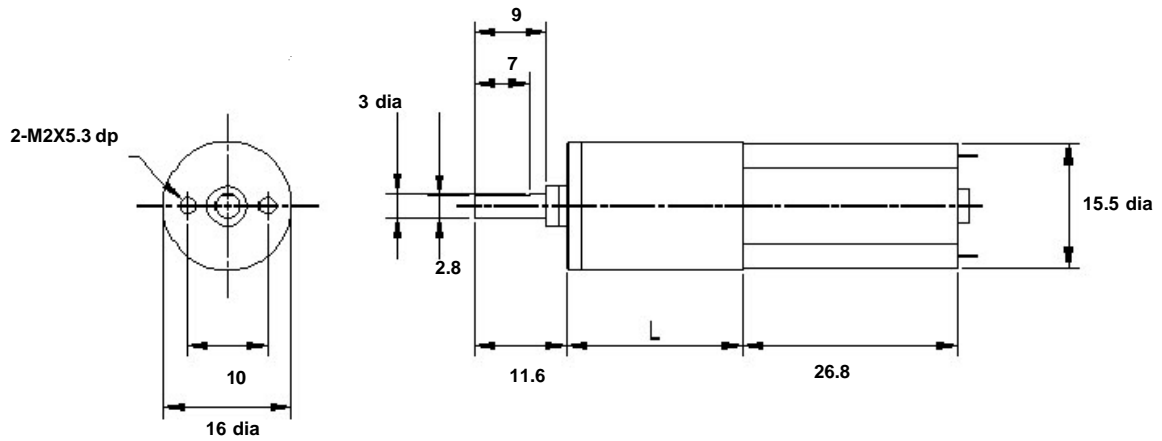
IMPORTANT NOTICE

At very low ratios the torque produced by this geared motor combination may exceed the maximum permissible torque of the gearbox. In this situation the unit must not be allowed to stall as this may damage the gears.

IMPORTANT NOTICE

Due to the wide range of applications for this product it is the users responsibility to establish the products suitability for their individual purpose(s).

941D SERIES 16mm PLANETRY (EPICYCLIC) SUB MINIATURE METAL GEARBOX



RATIO	L
4:1	15.0
19:1	18.7
29:1	18.7
62:1	22.3
84:1	22.3
104:1	22.3
128:1	22.3
231:1	26.0
455:1	26.0
561:1	26.0
1014:1	29.7

NOTE: all diameters in mm

FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 917D SERIES PAGE.

ADVANTAGES OF PLANETARY GEARBOXES.

EFFICIENCY:	Efficiencies of planetary gearboxes can be above 90% while some other types of transmission can be 50% or less. This allows the use of smaller motors.
SIZE:	Planetary gearboxes can be half the size of conventional boxes.
WEIGHT:	Weight savings can be as high as 60%, allowing smaller, lighter support structures.
MAINTENANCE:	Other than routine oil changes, no maintenance is required, eliminating the need to hold spares.
REVERSIBLE:	Planetary gears can be equally efficient in either direction. This is an advantage for use in running machinery in both clockwise and anti-clockwise directions.
COAXIAL:	The coaxial configuration of input and output shafts allows planetary gears to be installed in line with a motor and a machine.

Subject to minimum order quantities of 100 units, the following ratios are also available with a six week lead-time. The physical dimensions of these other gearboxes may vary from the data as illustrated above. Details of individual gearboxes are available upon request.

GEARBOX 14:1 WITH 941 MOTOR
 GEARBOX 72:1 WITH 941 MOTOR
 GEARBOX 157:1 WITH 941 MOTOR

GEARBOX 316:1 WITH 941 MOTOR
 GEARBOX 370:1 WITH 941 MOTOR
 GEARBOX 690:1 WITH 941 MOTOR

GEARBOX 1621:1 WITH 941 MOTOR
 GEARBOX 1996:1 WITH 941 MOTOR
 GEARBOX 3027:1 WITH 941 MOTOR